

Patent Claims

1. Mono or multilayered polypropylene cast film comprising at least one layer wherein said at least one layer comprises a two component polymer composition of a first component I and a second component II, characterised in that the first component I is a high crystallinity propylene homopolymer and the second component II is a heterophasic propylene copolymer.
2. Cast film according to claim 1, characterized in that the high crystallinity propylene homopolymer has a stereoregularity of 94 to 99%.
3. Cast film according to claim 2 characterised in that, the high crystallinity propylene homopolymer contains 98 to 100% by weight of propylene units.
4. Cast film according to claim 1 or 2 characterised in that, the high crystallinity propylene homopolymer has a melt flow index of 5 to 10 g/10min and a melting point of 150 to 170°C.
5. Cast film according to any of the preceding claims, characterised in that, the high crystallinity propylene homopolymer contains 1,5 to 5% by weight of xylene solubles.
6. Cast film according to any of the preceding claims, characterised in that, heterophasic propylene copolymer comprises a propylene homopolymer matrix and a dispersed elastomeric rubber phase.
7. Cast film according to any of the preceding claims, characterised in that, the heterophasic propylene copolymer contains 12 to 18% by weight of xylene solubles.

8. Cast film according to any of the preceding claims, characterised in that, the heterophasic propylene copolymer has an ethylene content of 5 to 15% by weight, based on the weight of the heterophasic propylene copolymer
- 5 9. Cast film according to any of the preceding claims, characterised in that, the heterophasic propylene copolymer has a melt flow index of 0,2 to 5g/10min.
10. Cast film according to any of the preceding claims, characterised in that, the heterophasic propylene copolymer has a Vicat softening point of 145 to 155°C.
- 10 11. Cast film according to any of the preceding claims, characterised in that, the heterophasic propylene contains less than 5 - 20% by weight of the elastomeric rubber phase, based on the weight of the heterophasic propylene copolymer
- 15 12. Cast film according to any of the preceding claims, characterised in that, the dispersed elastomeric rubber phase is a ethylene propylene copolymer.
13. Cast film according to any of the preceding claims, characterised in that, the ethylen propylene copolymer rubber has an ethylen content of 40 to 65%.
- 20 14. Cast film according to any of the preceding claims, characterised in that, the two component polymer composition is a mixture of the two components.
15. Cast film according to any of the preceding claims, characterised in that, the two component polymer composition is a blend of the two components.
- 5 16. Cast film according to any of the preceding claims, characterised in that, the ratio of the two components I and II is in the range of from HCPP:HP = 90:10 to 50:50.
- 20 17. Cast film according to claim wherein said ratio is in the range from HCPP:HP = 80:20 to 60:40.

18. Cast film according to any of the preceding claims, characterised in that, the base layer contains 80 to 100% by weight of the two components polymer composition, based on the weight of the layer.

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19. Cast film according to any of the preceding claims, characterised in that, the base layer containing the two components polymer composition is at least 50% of the overall film thickness.

10 20. Cast film according to any of the preceding claims, characterised in that, a second layer containing 80 to 100% by weight of the two component polymer composition is provided on the first surface of the base layer.

5 21. Cast film according to any of the preceding claims, characterised in that, a third layer containing 80 to 100% by weight of the two component polymer composition is provided on the second surface of the base layer.

0 22. Cast film according to any of the preceding claims, characterised in that, one or two intermediate layers are provided between the outer layers and the base layer.

23. Cast film according to any of the preceding claims, characterised in that, the base layer contains 1000 to 3000 ppm ~~500 to 5000 ppm~~ of a nucleating agent.

5 24. Cast film according to any of the preceding claims, characterised in that, both cover layers contain an antistatic agent and a slip agent.

25. Cast film according to any of the preceding claims, characterised in that, the antistatic agent is glycerol monostearate and the slip agent is oleamid and/or stereoamid.

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26. Label made from a cast film according to any of the preceding claims.

27. Use of the label according to claim 26 in an in-mould labelling process wherein the container is formed by injection moulding.

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28. Use of the label according to claim 26 in an in-mould labelling process wherein the container is formed by blow moulding.